(600)

Section IV
Root-Feeding Maggots, Soil Arthropods, and Other Problems

WIREWORM CONTROL ON POTATOES, 1986
R. L. Johnston and G. W. Bishop
SW Idaho R & E Center, Parma, ID 83660

Wireworm damage continues to be an increasing problem for potato producers in Idaho. In order to determine which chemicals or chemical combinations give the best control, field trials were conducted using 'Russet Burbank' potatoes at Caldwell, Idaho. Wireworm damage was assessed at harvest by examining 25 tubers from each plot. No phytotoxicity was noted in any of the treatments.

Percent wireworm damaged tubers in the check was 19%. The best treatment sustained 1.5% damaged tubers. Most growers would not experience such intense wireworm pressure, but rather might expect untreated fields to average 5 to 6% damaged tubers. Because the wireworm population was so high in our trials, treatments that sustained less than 7 to 8% damaged tubers would most likely work very well under lighter infestations.

Treatment and 1b ai/A	Avg. No. a,b Damaged Tubers/Replicate	Percent Damaged Tubers	Ave. No. Holes/Tuber
Furadan 15G 3.0 (BAND) + Dasanit 15G 3.0 (BAND)	0.38 a	1.5	0.02
01:0	1.75 sbode		
Mocap 15G 3.0 (BAND) + Di-Syston 15G 3.0 (BAND)	0.38 a	(4.1.5	0.02
Mocap 15G 3.0 (BAND) + Temik 15G 3.0 (BAND)	0.50 a	2.0	0.03
Furadan 15G 3.0 (BAND) + Mocap 15G 3.0 (BAND)	0.50 a	2.0	0.02
Temik 15G 3.0 (SDPE) + Mocap 15G 3.0 (BAND)	0.50 a	2.0	0.02
Thimet 20G 3.0 (BAND)	0.63 ab	2.5	0.03
SD 208304 15G 0.5 (BAND)	0.75 abc	3.0	0.03
Temik 15G 3.0 (SDPE) + Dyfonate 10G 4.0 (BDCST)	0.75 abc	3.0	0.02
Mocap 15G 3.0 (BAND) + Thimet 20G 3.0 (BAND)	0.75 abc	3.0	0.03
SD 208304 15G 1.0 (BAND)	0.75 abc	3.0	0.04
UAP 101 20G 2.5 (BAND)	1.00 abcd	4.0	0.11

Treatment and 1b ai/A	Avg. No. a,b Damaged Tubers/Replicate		Percent Damaged Tubers	Ave. No. Holes/Tuber
Dasanit 15G 3.0 (BAND)	1.00 abcd		4.0	
SD 208304 15G 1.0 (BDCST)	1.00	abcd	4.0	0.04
UAP 101 20G 3.0 (BAND)	1.13	abcd	4.5	0.04
SC-0567 5G 2.0 (BDCST)	1.13	abcd	4.5	0.06
Dyfonate 10G 4.0 (BDCST)	1.25	abcd	5.0	0.06
SC 208304 15G 2.0 (BDCST)	1.38	abcd	5.5	0.09
FMC 67825 20G 2.0 (IFAP)	1.50	abcd	6.0	0.11
FMC 67825 20G 2.0 (BAND)	1.50	abcd	6.0	0.10
Furadan 15G 3.0 (BAND) + Dyfonate 10G 4.0 (BCDST)	1.50	abcd	6.0	0.10
Disyston 15G 3.0 (BAND)	1.50	abcd	6.0	0.06
SC-0567 5G 4.0 (BDCST)	1.63	abcde	6.5	0.12
Thimet 20G 3.0 (IFAP)	1.75	abcde	7.0	0.10
Furadan 15G 3.0 (IFAP)	1.88	abcdef	7.0	0.10
Mocap 15G 3.0 (BAND)	1.88	abcdef	7.5	0.07
SC-0567 5G 1.0 (BAND)	2.13	abcdef	8.5	0.12
SC-0567 5G 0.5 (BAND)	2.50	bcdef	10.0	0.14
FMC 67825 20G 6.0 (BDCST)	2.50	bcdef	10.0	0.05
Telone II 20 gal/acre	2.63	cdef	10.0	0.17
Temik 15G 3.0 (BAND)	2.88	defg	. 11.5	0.22
Standak 5G 3.0 (BAND)	3.63	efg	14.5	0.19
Temik 15G 2.0 (SDPE)	3.75	fg	15.0	0.22
Check	4.75	g	19.0	0.23

Number followed by same letter not significantly different by LSD = 1.96 (P = 0.002)
 Total of 8 replicates (200 tubers)